
TECHNICAL MEMORANDUM

DATE: June 01, 2021

TO: **City of Ottawa – Jeff Shillington, P.Eng.**

FROM: Kevin L Murphy, P. Eng.

SUBJECT: **Barrhaven Conservancy
Response to Comments – Received via email from J.Shillington May 11/21**

DSEL Job No. 891 (City File No. D07-16-20-0021)

ATTACHMENTS: • Filtration System Details (Etobicoke System) – Construction Phase

Jeff,

As supplemental information, in response to the comments noted in the above subject line, the following provides some detail on the approach for protection of the Modified Etobicoke Filtration System (MEFS) proposed for the Barrhaven Conservancy development pre- and during construction period. In addition, the Functional Servicing Report has details on the future maintenance requirements derived from the Barrhaven South Urban Expansion Area Master Servicing Study:

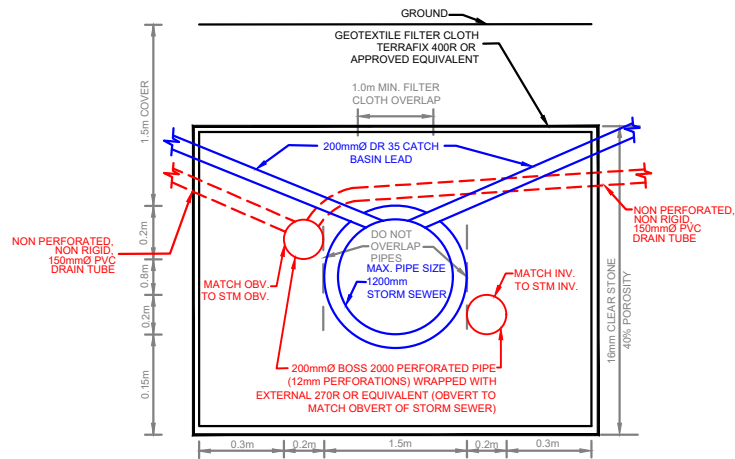
MEFS protection as it relates to the construction phase of the development:

- Prior to site works, an erosion and sediment (ESC) program will be developed. The program will be implemented prior to construction and remain in place until each discrete construction phase is completed to a stabilized condition with vegetation prior to MEFS operation in order to reduce sediment loads.
- Drainage from disturbed areas will be captured, treated and routed through the ESC system, and not through the MEFS;
- In order to minimize siltation in the newly installed MEFS system, including during construction of the MEFS, all lower leads in catchbasins which drain into the MEFS perforated pipe system will be plugged. As well, the lower perforated pipe connection to the downstream storm manholes will be blocked and the deep sump will be used to collect sediments. These can be effectively cleaned out periodically to remove sediment from the system (see attached drawing for details). The system will remain isolated until flow contributing development areas are completely stabilized with sod and pavement down;
- As each discrete development area is completed, all catchbasins and manholes and pipes will be flushed out prior to commissioning (with City concurrence) of the MEFS system.

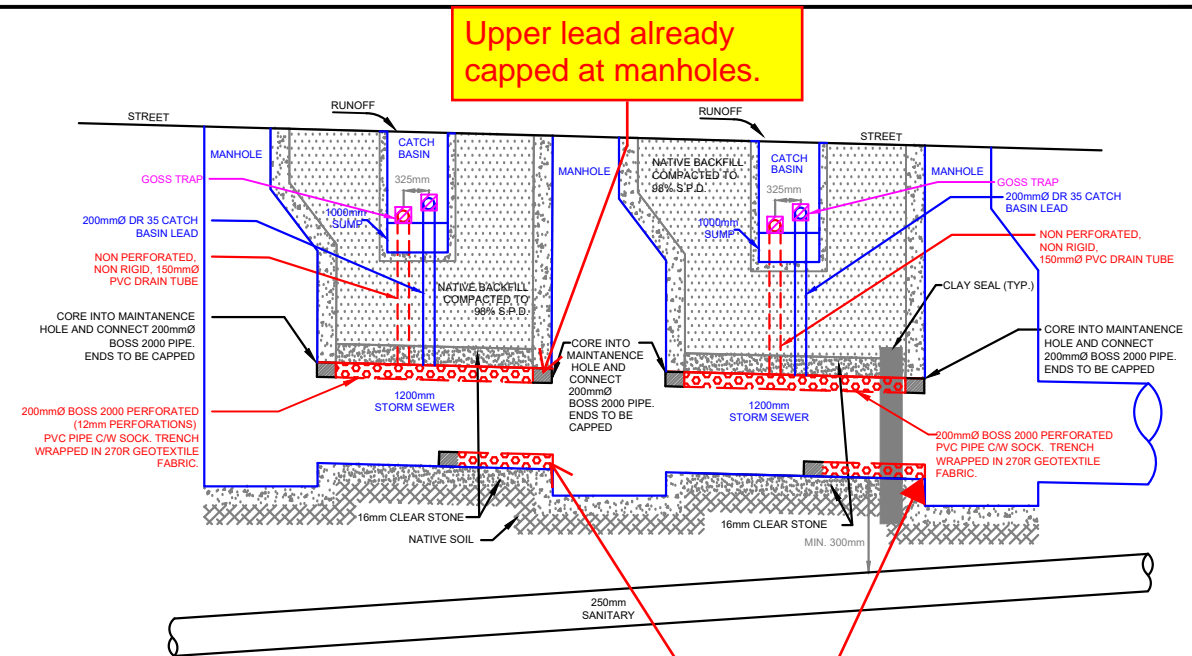
Kevin L. Murphy, P.Eng.

Upper lead already capped at manholes.

Lower lead in all catchbasins to be plugged during construction phase of the development.



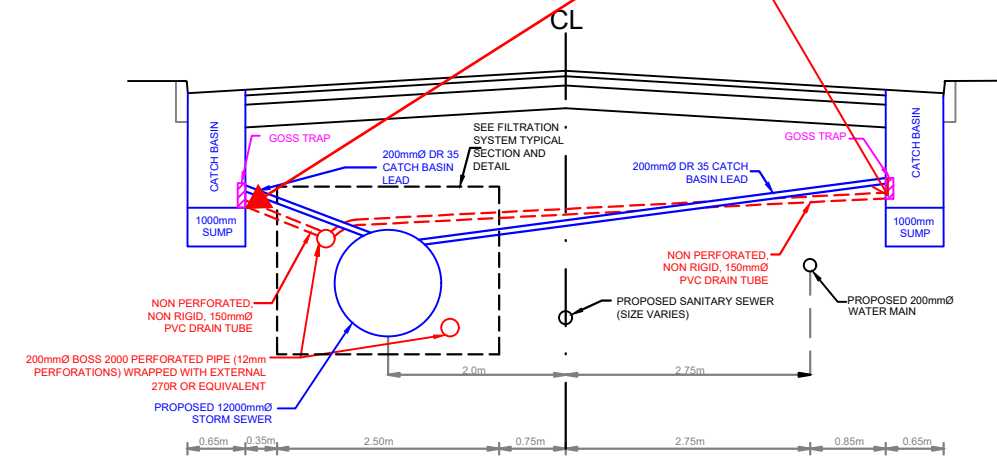
FILTRATION SYSTEM DETAIL TYPICAL SECTION N.T.S.



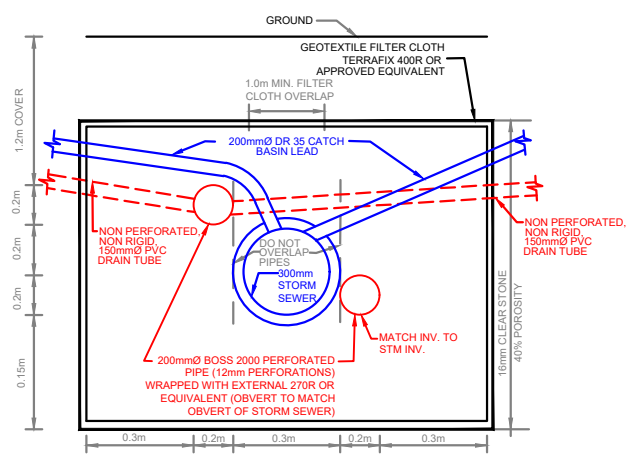
FILTRATION SYSTEM DETAIL TYPICAL PROFILE N.T.S.

Downstream end of lower MEFS system to be plugged at all downstream storm manholes during construction phase.

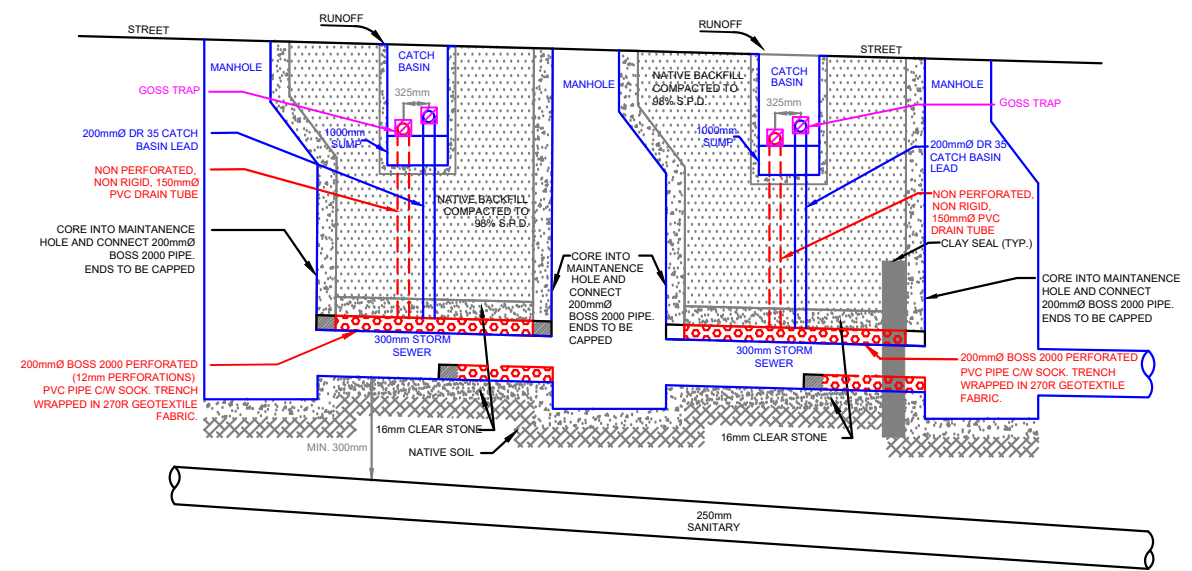
SCENARIO 1 - DOWNSTREAM FILTRATION SYSTEM



FILTRATION SYSTEM LOCATION CROSS SECTION (TYP) N.T.S.



FILTRATION SYSTEM DETAIL TYPICAL SECTION N.T.S.



FILTRATION SYSTEM DETAIL TYPICAL PROFILE N.T.S.

SCENARIO 2 - UPSTREAM FILTRATION SYSTEM



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BARRHAVEN CONSERVANCY EAST
FILTRATION SYSTEM DETAILS
CITY OF OTTAWA

PROJECT No.:	16-891
SCALE:	NTS
DATE:	MARCH 2021
FIGURE:	5